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Artikel Penelitian

NURSE-PHYSICIAN COLLABORATIVE PRACTICE IN INTERDISCIPLINARY MODEL OF PATIENT CARE

KOLABORASI DOKTER-PERAWAT DALAM ASUHAN PASIEN PADA MODEL PELAYANAN RAWAT INAP TERPADU

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ABSTRAK

Latar belakang: Penelitian tentang kolaborasi antara dokter dan perawat dalam asuhan pasien pada model pelayanan rawat inap terpadu (MPRIT) merupakan bagian dari *action research* yang bertujuan untuk mengembangkan model asuhan pasien sebagai basis integrasi antar profesi dalam pelayanan kesehatan di rumah sakit pendidikan Hasan Sadikin. Model pelayanan rawat inap terpadu (MPRIT) dikembangkan untuk meningkatkan tata kelola pelayanan pasien di tatanan rawat inap guna mengatasi fragmentasi pelayanan karena tumpang tindihnya peran dan fungsi *care provider* dengan latar belakang profesi yang berbeda. Diharapkan potensi kerawanan terhadap berbagai kesalahan dapat diantisipasi dan diminimalisasi, serta keutuhan dan kesinambungan pelayanan pasien dapat diwujudkan. Tujuan penelitian ini adalah untuk mengidentifikasi kerjasama dokter dan perawat secara kohesif dalam empat komponen model yaitu alur proses pengelolaan pasien, pengelolaan pasien secara tim, dokumentasi asuhan pasien secara terpadu dan pemecahan masalah secara interdisiplin.
Metode: Penelitian ini menggunakan studi deskriptif untuk mengidentifikasi perilaku afiliasi dan perilaku individu pada kelompok dokter dan perawat yang menjalani proses kolaborasi dalam pelayanan pasien di unit dengan MPRIT. Sejumlah 39 dokter dan 32 perawat berpartisipasi dalam penelitian ini. Instrumen untuk mengukur perilaku afiliatif dan perilaku individu dikembangkan berdasarkan konsep pelayanan interdisiplin dari Sullivan. Kohesivitas dokter dan perawat dalam kolaborasi asuhan diukur dengan uji beda rerata skor perilaku afiliasi dan perilaku individu pada keempat komponen model.
Hasil: Rerata skor perilaku afiliatif secara signifikan lebih besar dari perilaku individu pada tiga komponen model yaitu alur proses pengelolaan pasien, pengelolaan pasien secara tim, dan penyelesaian masalah secara interdisiplin. Temuan ini mengindikasikan bahwa dalam proses kolaborasi, dokter dan perawat cenderung menggunakan pendekatan *share expertise* daripada *personal autonomy*. Hal ini merupakan ciri kohesivitas kelompok. Baik pada kelompok dokter maupun perawat, rerata skor perilaku afiliasi lebih besar dari perilaku individu. Pada uji beda rerata skor perilaku individu antara dokter dan perawat, tidak ada perbedaan yang bermakna pada alur proses pengelolaan pasien dan dokumentasi asuhan terpadu. Adapun pada pengelolaan pasien secara tim dan penyelesaian masalah secara interdisiplin, rerata skor perilaku individu dokter secara bermakna lebih besar dari perawat. Pada uji beda rerata skor perilaku afiliasi antara kelompok dokter dan perawat, tidak ada perbedaan yang signifikan di alur proses pengelolaan pasien dan pengelolaan pasien secara tim. Adapun untuk dokumentasi asuhan terpadu dan penyelesaian masalah secara interdisiplin, secara signifikan rerata skor perilaku afiliasi dokter lebih besar dari perawat.
Kesimpulan: *Share expertise* merupakan ciri penting perilaku afiliasi yang diperlukan untuk mewujudkan kerja sama yang kohesif antar pelaku pelayanan kesehatan. Penelitian ini menyimpulkan bahwa dokter dan perawat bekerjasama secara kohesif pada alur proses pengelolaan pasien dan pengelolaan pasien secara tim.

Kata kunci: kolaborasi, dokter-perawat, interdisiplin, perilaku afiliasi, perilaku individu

ABSTRACT

Background: The purpose of this study is to identify cohesiveness among nurses and physicians in collaborative practice during the implementation of an interdisciplinary model of inpatient care in Hasan Sadikin Teaching Hospital. Cohesiveness in collaborative practice is needed to bridge the classical problems in multidisciplinary approach of care provision, whereby every single discipline works on their own. It is expected that the model tested prevents lack of coordination and role overlap in order to deliver care safely, continuously, using an integrated approach. Cohesiveness was examined using expert culture or collective culture in four components of the model, namely care path, teamwork on patient care, integrated patient documentation, and interdisciplinary case conference.
Method: A descriptive design was implemented to identify collective culture and expert culture. Thirty nine physicians and 32 nurses participated in this study. Collective culture and expert culture were measured using an inventory developed based on Sullivan's concept of interdisciplinary health care. Mean difference on collective culture and expert culture scores were compared to identify significant difference between physicians and nurses in the four aspects of interdisciplinary health care.
Results: The score of collective culture was significantly higher than score of expert culture in regards to care path, teamwork on patient care, and interdisciplinary case conference. This result indicates that among nurses and physicians who work collaboratively, the tendency of using share expertise was greater than personal autonomy. The mean difference of expert culture among nurses and physicians did not differ significantly in two aspects, namely care path

and integrated patient documentation. While for the other two components, i.e. teamwork on patient care and interdisciplinary case conference, the physicians' mean score of expert culture was significantly greater than nurses. In regards to collective culture, the mean scores in physicians and nurses were not significantly different in care path, and teamwork on patient care, The difference was, however, significant for the other two components, namely integrated patient documentation and interdisciplinary case conference. The mean score of physicians was significantly greater than the nurses.
Conclusion: Share expertise is the core of collective culture which is needed in all collaborative work. Cohessiveness among nurses and physicians was present in the implementation of care path and teamwork on patient care.

Keywords: collaborative, nurses, physicians, interdisciplinary, collective culture, expert culture

INTRODUCTION

Interdisciplinary model of patient care is an integrated model of care for hospitalized patients which is being developed to synchronized health care professionals in a participatory, collaborative and coordinated approach to share decision making in delivering process of care. "An interdisciplinary team consists of practitioners from different professions who share a common patient population and common patient care goals and have responsibility for complementary tasks. The team is actively interdependent, with an established means of on going communication among team members and with patients and families to ensure that various aspects of patients' health care needs are integrated and addressed".[1]

Interdisciplinary model of patient care was developed to create a culture which enable to support the health care professionals to collaborate and integrate their care practices into a comprehensive manner so that lack of coordination, role overlapped and fragmented care might be minimized. Interdisciplinary approach is needed to develop collaborative teamwork in the practice setting so that in the future health care professional may grow up and learn in a situation that supports trust, willingness to share in patient care decision making, and meaningful inclusion of patients and/or family members in discussions about their care. Therefore, cohesiveness among health care professionals in this case nurses and physicians is a must. Cohesiveness could be achieved when those involved in collaborative practice give more attention to share expertise which is characterized by collective culture, rather than personal autonomy, as the main character of expert culture. "Moving toward patient-centered interdisciplinary collaborative practice requires a fundamental shift in health professional's attitudes towards such an approach. In order to facilitate such a change there is a need to create a new culture in health systems that supports trust, a willingness to share in patient care".[1] Development of a culture supporting collaborative practice is a critical step forward. Understanding culture is the foundation, not only the culture of the patients who seek care, but the culture of existing health systems and the society that shapes them.[2]

In this study, collaborative culture is created through four components of a model, consisting of care path, teamwork on patient care, integrated patient care documentation and interdisciplinary case conference. For each component, sense of control, information sharing, attention to co-territory as overlap of responsibility or areas of concern, and structuring intervention were the key ingredients. The purpose of this study is to identify cohessiveness among nurses and physicians in collaborative practice during the implementation of interdisciplinary model of patient care in the medical ward of Hasan Sadikin Teaching Hospital.

LITERATURE REVIEW

Key ingredients of the interdisciplinary practice are sense of control, information sharing, and attention to co-territory and structuring intervention.[3] These four ingredients embodied in each component of the model,united in the essence of care path, teamwork on patient care, integrated patient documentation and interdisciplinary case conference. Cohessiveness of nurse - physician collaborative practice is reflected from their attitudes and tendency to behave ineach component of the model. Cohessiveness exists when those who work collaboratively have the tendency to use more of share expertise than personal autonomy.[3]

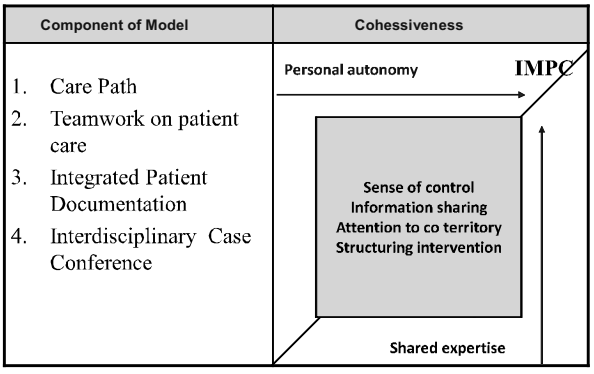

Figure 1. The conceptual framework: Cohesiveness in interdisciplinary model of patient care

Clark & Drinka[4] defines the Interdisciplinary Health Care Team (IHCT) as "a group of individuals

with diverse training and backgrounds who work together as an identified unit or system. Team members consistently collaborate to solve patient problems that are too complex to be solved by one discipline or many disciplines in sequence. In order to provide care as efficiently as possible, an IHCT creates "formal" and "informal" structures that encourage collaborative problem solving. True interdisciplinary practice is defined as a partnership between a team of health professionals and a participatory, collaborative and coordinated approach to shared decision-making around health issues. Collaboration is defined as a joint communication and decision-making process with the goal of satisfying the health care needs of a target population. The basis of collaboration is the belief that quality patient care is achieved by the contribution of all care providers. It is assumed that the contribution of each participant is based on knowledge or expertise brought to the practice. Being competent in a clinical practice creates a sense of control, understand and respect how other disciplines approach clinical problems. Information sharing is another core competency for interdisciplinary collaboration. Health care is too complex for any solo practitioner to handle, because the determinants of health are beyond the capacity of any single practitioner or discipline to manage and information is overwhelming and is beyond the management ability of any single practitioner or discipline. Collaborative efforts are successful when there is a clear understanding of relationships and goals, by paying attention to co-territory/overlap responsibility or areas of concern, mutual trust and sense of equality being develop; jointly developed structure and shared responsibilities creates awareness of "who is doing what"; authority and accountabilities are accepted; and a mutually developed vision in which each member sees his or her self-interest. When it involves physicians and nurses, collaborative practice may provide greater opportunities to educate and counsel patients with goals of preventing disease, promoting wellness, and increasing adherence to treatment.

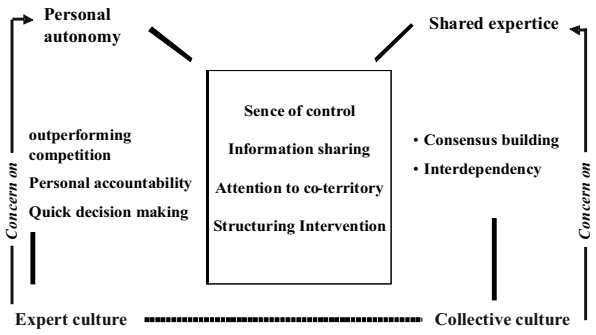

Figure 2. The conceptual framework: the essence of collaborative practice on interdisciplinary model of patient care

Those four core competencies of collaborative practice require a condusive environment in certain culture to be developed. "Culture is a shared pattern of values, beliefs and behaviors, values manifested by behaviors, define the strength of the culture. In the context of organization behavior and decision making, a culture is the personality of organization. It reflects the way things are done. Culture comprises of expert culture and collective culture, and both are present in health care systems. The collective culture is comprised of highly affiliative staff who embrace the mission, values, and vision statements of the organization. Healthcare professionals who are dominated by the motivational profile of affiliation work in a collegial manner, through trust and loyalty".[5] They are good in a teamwork that is characterized by consensus building and interdependency. Shared expertise is the main concern in collective culture. Expert cultures are characterized by individualized behavior that is motivated primarily by self-interest, dominated by the motivational influences of accomplishment and power. At each point, success was determined by out-performing the competition. Achievement, risk-taking, quick decision making, and personal accountability were some of the main characteristics that were consistently reinforced. Personal autonomy is the main concern in expert culture.

METHOD

A descriptive study design was implemented to identify cohessiveness of physicians and nurses who were involved in interdisciplinary model of patient care. We compared nurses and physicians in their tendencies to use personal autonomy or share expertise in delivering patient care. Cohessiveness was examined using expert culture or collective culture in four components of the model, namely care path, teamwork on patient care, integrated patient documentation, and interdisciplinary case conference. Thirty nine phisicians and thirty two nurses participated in this study. An inventory to measure expert culture and collective culture (in five scale) in the context of interdisciplinary model of care was developed based on concepts of collaboration and interdisciplinary health care practice (alpha cronbach 0.844). The mean difference on collective culture and expert culture scores were compared to identify the significant differences

between physicians and nurses in the four aspects in interdisciplinary health care. The hypotheses were: 1) there is no difference between mean score of collective culture and expert culture in the four components of interdisciplinary model of care, 2) there is no significant difference among groups of physician and nurses in their mean score of collective culture and expert culture in the four components of interdisciplinary model of care.

RESULT

This study involved 71 respondents, consisting of 39 physicians and 32 nurses, who worked in the units applying the model. Among those, 42 are females and 29 are males. Regarding age, 43 respondents are in the age group of 18-40 years old, 27 respondents are in the age group of >40-60 years old and 1 respondent is more than 60 years old. Most respondents were internist (32), followed by Diploma III in nursing (19), bachelors (19), master (8) and PhD level (1). Their working experiences also vary: 12 respondents have <1 year of experience, 28 respondents have 1-5 years of experience, 9 respondents have 5-10 years of experience, and 22 respondents have >10 years of experience.

Table 1. Group's score of expert culture and collective culture in the four components of model

Components of interdisciplinary model of patient care	Mean score		
	Expert culture	Collective culture	Level of significance
Care path	36.92	40.6	0.000
Teamwork on patient care	32.55	38.66	0.000
Integrated patient documentation	34.41	34.01	0.505
Interdisciplinary case conference	26.94	32.34	0.000

Table 1 shows that the mean score of collective culture was significantly greater than expert culture in the three components of model, namely care path, teamwork on patient care and interdisciplinary case conference. Therefore, the null hypothesis was rejected. This finding indicates that among those who are involved in the implementation of this model, share expertise was the way of conduct. In the component of integrated patient documentation, however, mean score of expert culture didnot differ significantly than collective culture. This implies a different perspective. In the context of documentation as integrated part of collaborative care, the respondents both exert their personal autonomy and share their expertise mutually.

Table 2 shows that in physician, the four components of interdisciplinary model of patient care, the mean scores of collective culture were greater than expert culture. A similar condition exists in nurses, except in integrated patient documentation. The mean scores of expert culture between physicians and nurses were not significantly different in two components of model ($p > 0.05$), namely care path and integrated patient documentation. Therefore, the null hypothesis was accepted. Regarding teamwork on patient care and interdisciplinary case conference, the physicians' mean score of expert culture was significantly greater than nurses (p 0.005 and 0.015). The comparison of mean scores of collective culture shows that there was no significant difference between physicians and nurses in care path, and teamwork on patient care. While for integrated patient documentation and interdisciplinary case conference, the physician's mean score was significantly greater than nurses ($p < 0.05$).

DISCUSSION

The findings show that collective culture was significantly greater than expert culture in three components, i.e. care path, teamwork on patient care and interdisciplinary case conference. Care path was developed interdisciplinary by nurses and physician prior to implementation of the model. They have agreed on the flow of care and the standard of intervention for each profession. The culture of share expertise may have been the result of a long working process in developing the model.

Table 2. Comparison of physicians and nurses in expert culture and collective culture in the four components of model

Components of Interdisciplinary model of patient care	Professional group	Collective culture			Expert culture		
		Mean	SD	α	Mean	SD	A
Care path	Physicians	40,44	3,042		36,72	3,103	
	Nurses	40,81	3,667	0,638	37,16	3,985	0,604
Teamwork on patient care	Physicians	38,67	3,601		33,97	4,392	
	Nurses	38,66	3,633	0,990	30,81	4,775	0,005
Integrated patient documentation	Physicians	34,77	3,141		34,67	3,549	
	Nurses	33,09	3,675	0,042	34,09	3,613	0,504
Interdisciplinary case conference	Physicians	34,13	4,747		28,69	7,526	
	Nurses	30,10	6,161	0,003	24,74	5,164	0,015

Team work on patient care was designed and implemented by grouping the patients (i.e. into four wings/areas) and each group of patients was put under the responsibility of a group of physicians and nurses respectively for a certain period of time. This comprehensive approach and continuity of care creates the opportunity to communicate effectively, develop a close relationship personally, and build a mutual respect.[6] Interdisciplinary case conference was agreed and conducted on a daily basis to discuss patients with complex clinical problems. This environment produces opportunities for physicians and nurses to learn how to express their professional capacities in order to solve the problems, learn to communicate and negotiate effectively, and learn to listen and appreciate contribution from others. This supports the capacity in making consensus and creating interdependency. Bringing together of meanings happens via the process of communication, cognition and cooperation.[7] All of these process support the findings that in care path, teamwork on patient care, and interdisciplinary case conference share expertise was greater than personal autonomy.

In respects to integrated patient documentation, there is no significant difference between expert culture and collective culture. Although patient documentation was part of the aspect in collaborative care, apparently physicians and nurses maintain their personal autonomy as well as their exert on share expertise in making and using patient documentation.

In respect to how physicians exert their personal autonomy and share expertise in this interdisciplinary model of patient care, the finding was surprising. In the four components of model, physician's tendency to use collective culture was greater than expert culture. This is contrary to the conventional culture of the physicians as experts, who are motivated to a large degree by accomplishment and power. Achievement, risk-taking, intense focus, quick decision making, personal accountability were some of the main characteristics of physicians that were consistently reinforced, weaking the importance of teamwork. In this model, the fundamental shift in professional's attitude towards interdisciplinary collaborative practice and a new culture in health systems that supports trust, willingness to share in patient care decision making could have been created.

For nurses, the tendency to use the collective culture in care path, team work on patient care and interdisciplinary case conference was greater than expert culture. Nurses have high affiliative staff, working in collegial manner and tend to enjoy work environments that put others ahead of self, give trust, and value loyalty. However in regards to integrated patient documentation, the tendency to exert the personal autonomy was greater than share expertise. This might correspond to the process of group work where power sharing, role socialization and clarification, trusting relationship were emphasized through the four ingredients as the essence of collaborative practice (namely sense of control, information sharing, attention to co-territory and structuring intervention). Through these process nurses learn how to be assertive, communicate effectively, make a critical decision and develop self-confidence as part of the expert culture.

Comparing physicians and nurses in their tendency to use share expertise or personal autonomy in care path, the difference was not significant. A lengthy process of group work in developing the care path as a common guideline may have created a condusive environment, trust, acceptance and appreciattion of others' roles and functions, and mutual respect, leading to cohessiveness. In team work on patient care, the tendency to share expertise between the physicians and nurses were not significantly different, unlike in expert culture whereby physician's score was greater than nurses. This may be related to the inherent professional characteristics of physician to take responsibility as team leader and autonomous decision maker.

In integrated patient documentation, there is no significant difference between physicians and nurses in their tendency to use expert culture. However, physician's score in collective culture was significantly greater than nurses. This means physicians trust the patient's data documented by professional partner including nurses and use the patient documentation as the bases for communication and continuity of care among team member. The physicians have more commitment and self-confidence to document their work. While for the nurses, the weakness is to make patient documentation accurate to be used for professional communication and continuity of care. The finding is partly in line with finding in a study on patient documentation. Out of 42 patient documentation in units applying integrated model unit were analyzed whether these documents fulfill the basis indicator for communication, legal aspect and continuity of care. As a base for continuity of care, 52.4% of the documents shows the presence of reassessment data, only 9.5% nurses put the time of intervention and 37.5% client's responses over the intervention were documented.[8]

In the interdisciplinary case conference, both expert culture and collective culture among physicians were significantly greater than nurses. While case conference is part of the scientific climate in medical profession, it is relatively new for nursing.

In care path and teamwork on patient care, physicians and nurses have the same culture in professional practice. In integrated patient documentation and interdisciplinary case conference, physician's collective culture was greater than nurses. This is in contrary to the common norm in health care service delivery, i.e. physicians have high expert culture, while nurses have high affiliative culture. In this interdisciplinary model of care, barrier within interdisciplinary collaborative professional practice such as power imbalances, role socialization and role overlap, and organizational structuralism[1] have successfully being solved through the implementation of four ingredients of collaborative practice which are sense of control, information sharing, attention to co-territory/overlap responsibility and structuring intervention. By enhancing the methods of communication among interdisciplinary health care professionals, individuals perform their respective duties and work more efficient because less time is spent in managing communication. Interdisciplinary health care team emphasizes a holistic approach. To achieve the unique goals for this care model, each discipline must collaborate interdependently and appropriately lead the team efforts based on their professional knowledge.[9] Unique contribution of each discipline in collaborative practice is strengthened by the ability to present the concept of collectiveness.[10,15] The collaborative process of share discussion and meaning, mutual trust and respect to collegiality and professionalism among team members could have been established. This new environment could serve as a learning environment to medical and nursing students so that their collaborative capacities and teamwork might be developed earlier in their professional life. The elements that must be in place for a successful interdisciplinary collaboration are interprofessional education, role awareness, interpersonal relationship skills, deliberate action and support.[11]

By participating in an interdisciplinary educational experience, students may have the benefit of increased awareness and understanding of professionalism in clinical settings and its potential contributions of each discipline to the health care team. When interdisciplinary teamwork is in place, the delivery of safe, consistent, quality patient care becomes a far more attainable goal.[12,14] Faculty members can strengthen students' commitment to interdisciplinary health care through structured learning activities.[13]

LIMITATIONS

The measurement of collective culture and expert culture is limited to physicians and nurses. In this study there was no previous measurement prior to implementation of the interdisciplinary model of patient care. Therefore, repeated measurements are necessary with inclusion of other health professionals.

CONCLUSION

In interdisciplinary model of patient care, physicians and nurses work cohessively in a partnership collaboration through building a sense of control by being competent in clinical practice, share information, pay attention to overlap responsibilities and structuring intervention in the integrated care path, teamwork on patient care, integrated patient documentation and interdisciplinary case conference. As a learning environment in a teaching hospital, more extensive research need to be carried out, especially in integrated patient care documentation and the effect of this cohessive professional practice climate on the awareness of medical and nursing students toward collaborative professional partnership.

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